

**ARMED FORCES INSTITUTE OF PATHOLOGY  
ORAL HISTORY PROGRAM**

SUBJECT: Dr. Florabel Garcia Mullick  
INTERVIEWER: Mr. Charles Stuart Kennedy  
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[Note: This transcript was not edited by Dr. Mullick]

*Q: Dr. Mullick, welcome to the program. Dr. Mullick, could you please give me some of your background, where were you born?*

**DR. MULLICK:** I was born in Spain.

*Q: Where in Spain?*

**DR. MULLICK:** A region called Asturias. It's on the northwestern coast of Spain, close to Portugal.

*Q: What's the background of your parents?*

**DR. MULLICK:** My father was a native Spaniard, born and raised and never came to America. He was from Spain and stayed in Spain until he died. My mother was born in Puerto Rico, because my grandfather had emigrated to Puerto Rico when he was very young.

*Q: Also from the same region?*

**DR. MULLICK:** The same region. My grandmother also from the same region. My mother just happened to be born in Puerto Rico, but she went back to Spain every year with my grandfather, who used to spend three or four months in the summertime in Spain. On one of those trips, when my mother was a young lady, she met my father and they got married. My mother stayed in Spain for eleven years, and that's when I was born. Then she went back to Puerto Rico, and I went with her and my brother.

*Q: Were you basically raised in Puerto Rico?*

**DR. MULLICK:** Yes, beyond ten years of age, yes, I was raised and went to school there.

*Q: Where did you go to school?*

**DR. MULLICK:** I went to a Catholic private school in Puerto Rico for my elementary

and high school, and for my college undergraduate I went to the School of Science at the University of Puerto Rico.

*Q: What attracted you towards science?*

**DR. MULLICK:** Oh, I just couldn't say. It's something that I always knew I wanted to do. Just like when I went to medical school, I always knew I wanted to be a pathologist. Some of my classmates were they hesitating, oh, I will be an ophthalmologist, and then they changed, no, I want to be a surgeon. Others didn't know, and I think that maybe they still don't know what they want to do. I always knew. I always knew I wanted to be a pathologist. I always knew I wanted to be a resident in pathology, at least to begin my career in Puerto Rico.

*Q: Well, now, when you were going to college and you were interested in science, I'm not familiar with the culture there as much, but I think there would be a tendency to try to push women towards the fine arts, the liberal arts, or something, and science was something for men and all that. Did you find that you were sort of bucking a cultural tide?*

**DR. MULLICK:** Yes, I was--twofold. I was fighting a big battle at home with my family, because originally, in my family, women didn't study beyond high school. They were supposed to just be groomed to be married to a nice, successful young man and continue life raising a family. In my family, I was the first one actually who really wanted to pursue a career beyond high school. Some of my classmates did a few years of college. But, of course, studying English and languages. One became a dietician. I was the first one who wanted to pursue a career. And it was a big shock.

*Q: How did you fight the battle?*

**DR. MULLICK:** Well, by being determined, not changing my mind, just pursuing what I wanted to do, and nicely but strongly trying to convince mostly my grandfather, who was a big opponent of our studying. It was, in his words, a big embarrassment for the family to have me pursue a career. But I succeeded.

*Q: Well, then, what about on the other front? You said you were fighting both the family and at the university.*

**DR. MULLICK:** At the university, it wasn't a very big battle. But, of course, the tendency was that when anyone wanted to apply to the medical school in Puerto Rico, you kind of noticed that they were not very happy about having a female candidate. And some, not everyone, but some people might ask you, "Well, don't you think that maybe you'd want to be a dentist better? You won't have so many calls." And, "Well, don't you think that you might be wasting a position in this school, because maybe you'll finish

medical school and you'll want to just stay home with the children?" So there was sort of this here and there, but, of course, it was not very opened at that time. It was in 1960.

*Q: I suppose, too, that, having won your battle at home, you weren't going to allow these people to get in your way.*

**DR. MULLICK:** Oh, no, definitely not. I already knew what I wanted to do, and I just went about it in the best way that I could. And that was being strong, but being nice, and not really fighting openly anyone or being nasty.

*Q: You went to medical school where?*

**DR. MULLICK:** At the University of Puerto Rico Medical School.

*Q: In your class, then, were there many women?*

**DR. MULLICK:** Relatively speaking, yes, we were many. The total class was 51, a very small class. At that time still, in Puerto Rico, it was very difficult to be accepted at the medical school. It was always an approved medical school by the American Joint Commission, so we were accredited in the mainland. And it was very competitive, so you had to have almost a flawless record, with perfect interviews and so on. They only accepted 50 or 51, 52. We were 51, and we were, I think, 11 women, which is quite a large number for then. I think we graduated eventually seven or eight of us only, at the end. For different reasons, all of us didn't get to the end.

*Q: You say you always wanted to be a pathologist, but was there a strong school of pathology at the University of Puerto Rico?*

**DR. MULLICK:** Oh, yes, yes.

*Q: Was this a specialty there?*

**DR. MULLICK:** Yes, and a very good specialty. The chairman of pathology at the University of Puerto Rico is a very well-known pathologist, in the pathology world. He is an expert in many things, but especially infectious diseases. And he is the author of a book, also the author of many chapters in our own books at the AFIP.

*Q: What is his name?*

**DR. MULLICK:** His name is Raoul Marcia Rojas, and he is a very well-known, famous person. He had a very strong department of pathology, a very successful department. That was a plus for me, wanting to be a pathologist and staying there.

*Q: Try to go back to the time in the 1960s, would you, when you were in medical school. What was it about pathology that attracted you more than, say, surgery or orthopedics or what have you?*

**DR. MULLICK:** I think it was the fact that a pathologist is called the consultant of consultants. And what that means is going beyond being an expert and being asked by your peers. It means that you have to know almost every specialty, if not in depth, but quite a bit. And I have been always interested in knowing a lot about many things. Of course, that can be said that maybe I'm a master of all trades and really nothing. But not quite. I was always interested in studying things in depth. And the more that I could know, the more satisfying it was. So, for me, to be a pathologist meant I had to know pediatric pathology, I had to know orthopedic pathology. And that was very attractive to me. I didn't want to be limited to one specialty alone.

*Q: Were there any of those areas of pathology that particularly grabbed you?*

**DR. MULLICK:** Well, yes, I was always interested in pediatric pathology. And that's how I came to be part of the mainland residency program. I saw an opportunity to subspecialize in pediatric pathology after I was in pathology. And I was given a scholarship.

*Q: This was when?*

**DR. MULLICK:** That was in '66. I had graduated from medical school in '64, and I had done my internship, a rotating internship. Again because I wanted to be aware of all the other specialties, I chose a rotating internship.

*Q: Where did you do that?*

**DR. MULLICK:** It was done at the university hospital of the Puerto Rico Medical School. And that was the hospital where all the difficult cases from the island used to be referred to.

*Q: Were there any particular medical problems that you were seeing at that time in Puerto Rico in more volume, say, than if you had been in Arizona or somewhere else?*

**DR. MULLICK:** Well, I think, especially in pediatrics, it was a situation with infectious diseases, quite a bit of infectious diseases. Diarrhea in little babies, that was a very sad thing to watch, and something that I wanted to do something about. And so I would be very concerned if I saw these babies come into the hospital and only last a few hours. So when I was on call, for example, in pediatrics, I never slept. I would spend the whole night going around the babies and pinching them, so that I could know which one was not well and which was one better, and hydrating them with a little water and so on. So I

would spend all night just making the rounds.

*Q: Could you do much for the babies if they came in time?*

**DR. MULLICK:** Well, yes, absolutely. Timing was very important, because they would just dehydrate in a matter of seconds, and then disappear in front of your eyes. So if you really went around and tried to see them, of course, you cannot save every one, but the care can be improved.

*Q: Were you also on call outside, going out into the city, or were you pretty well concentrated?*

**DR. MULLICK:** No, we were concentrated. Your call was at the hospital.

*Q: How did your family feel about it after you became a doctor and started into this?*

**DR. MULLICK:** Well, they accepted it, but still exerting some control. For example, my mother hired her own driver with a car, taking me to the hospital, bringing me back, and bringing the meals so that I would eat sometime. It was a kind of yes-and-no kind of situation. But my colleagues loved that, because they would get to eat very nice meals Mom had sent with the driver. So they would tell me, "The driver is outside. It's time to eat, Florabel." So it was kind of like a compromise for my mother to allow me to be on call and be out of the house, but at the same time, she knew what was going on and she took care of me that I had eaten well... It was fine.

*Q: Well, that sounds like a very healthy compromise.*

**DR. MULLICK:** Yes, it was. And my grandfather kind of understood that I really wanted to do this.

*Q: Did your grandfather start talking about, "My granddaughter, the doctor."?*

**DR. MULLICK:** Of course, yes. After you graduate, then it was, "My granddaughter, the doctor." Or, "My daughter," for that matter, you know. It happens. Still, a physician is considered by many people to be, if not the top, one of the top professions. So people around you are already proud of your accomplishment and mostly supportive.

*Q: You did your internship in Puerto Rico, and then you moved on. In 1966, where did you go?*

**DR. MULLICK:** I came to Washington, D.C. I did a year of internship, and then one year of pathology residency at the University of Puerto Rico Medical School, with Dr. Marcia Rojas.

*Q: And was he concentrating you on any particular area of pathology?*

**DR. MULLICK:** Yes, he had identified for me the position of chief of the oncologic hospital. I was very flattered by that, and I told him so. However, I told him that what I really wanted to do was subspecialize in pediatric pathology. They were building the pediatric hospital at that time, and my dream was to become the chief of the pathology section at the pediatric hospital. He wasn't very receptive to that, because he had plans he had made at the oncologic hospital. But, again, I knew what I wanted to do. I talked to him quite a few times, and I talked to the dean. And the dean was very pleased, because they were looking for someone who was interested in pediatric pathology for the new hospital. I was offered a very good sort of scholarship, but it was not a true scholarship. It was a position almost at the level of assistant professor, to come here and train.

*Q: Here being Washington.*

**DR. MULLICK:** In Washington. I was accepted at the Children's Hospital of Washington, D.C. Now it's called, I think, the National Pediatric Hospital. The name escapes me right now. They changed the name. But it's the pediatric health department in Washington, D.C. I was accepted there as a resident. And I came... Puerto Rico. And I spent two years doing pediatric pathology.

*Q: That was '66-67.*

**DR. MULLICK:** Right, exactly, '66-67.

*Q: What were the types of cases that you were seeing. You were out of the Puerto Rican environment and you're into the Washington environment. Was there a change?*

**DR. MULLICK:** There was a change, in a way, because I wasn't seeing so many, for example, infectious diseases or so many general diseases. I was seeing more of tumors. And then at the hospital at that time there was a large grant to study Sudden Infant Death Syndrome. Actually, my second year at Children's was a scholarship, half time doing the Sudden Infant Death Syndrome research.

*Q: These are small babies dying in their cribs.*

**DR. MULLICK:** Right, that's crib death. In Puerto Rico, also, there were nutritional problems and a lot of fundamental malformation of newborns. I got to see a lot of newborns. Children's Hospital, not being a hospital that had an obstetrics department, didn't have those types of cases. I didn't see placentas in Children's Hospital; I saw a lot of placentas in Puerto Rico. However, my training was supplemented by going to the Columbia Hospital for Sick Children in New York to study placentas for two months. I

studied with Dr. Blank, who's a renowned person in placental pathology. So that was very valuable training.

*Q: I'm a non-medical person. With placentas, what was the issue?*

**DR. MULLICK:** By studying placentas, you can study, for example, diabetes. You can study infectious diseases. Sometimes there are tumors in the placenta, and you study the umbilical cord to see if there is any reason for a certain type of anomaly in the baby. It is a wonderful organ to study. You can know a lot about the baby by studying the placenta. You can also sometimes know things about the mother; many times you can learn things about the mother.

*Q: When you were working on the Sudden Death Syndrome, the study continues, but what was the thought at that time?*

**DR. MULLICK:** Yes, the hypothesis at that time of Dr. James Patrick, who was the leading investigator and chief of pediatric pathology at Children's Hospital, was that this was an infectious disease, that Sudden Infant Death Syndrome was caused by a virus that, in a way, was a seasonal event. What the study consisted of was, of course, doing some pre-autopsies on the babies that died, but also studying the families. I also took part in that exercise. And this was quite interesting, because it consisted of a team that had a nurse, a lab technician, a physician (that was myself), and sometimes a social worker. And we would go into the homes of the babies that died. We would interview the families, we would study the setting, and we would take samples from the families for a virus study. Then the social worker would talk to the mothers and the fathers. There was a strong feeling of guilt many times.

It was a wonderful experience for me, because it was field work, and as a pathologist, it's not very often you get that opportunity. So it was a tremendous opportunity for me, because the babies, of course, most of them came from the low social economic aspect families, but there were also middle class and upper class families involved. But to be able to go into the inner city and see the situation in the homes was a fascinating thing for me, to see the different approaches or different attitudes. Of course, every relative that I remember interviewing was extremely upset about what had happened and extremely concerned.

*Q: By the time you left this study, how was the hypothesis developing?*

**DR. MULLICK:** Well, the hypothesis, even during the time that I was working with..., there were thoughts about, well, maybe the babies turned their heads too quickly and something happened to their spinal cords. Other people had ideas about these being related to the pericytial glands. So the concept has evolved. It started to evolve at that time as well. I remember when I used to do the autopsies, collecting the pericytial, for example, for Dr. Maria Valdez D'Apina, who's a very well-known pediatric pathologist

involved with the study of Sudden Infant Death Syndrome.

*Q: While you were at the Children's Hospital, did you have any relationship with the AFIP? Did you know of it?*

**DR. MULLICK:** Oh, definitely, yes. I knew of the AFIP for as long as I can remember. When I was a medical student, I was the only proud owner of the entire first edition of the AFIP fascicles. It was covered with a black cover. I still have that collection. And I was very proud that I had that collection with me. I used to read things that came from the AFIP. I used to know people and tried to learn about people here. I was always very interested in the AFIP.

*Q: At the Children's Hospital, were you able to visit?*

**DR. MULLICK:** Yes, yes, definitely, yes. I used to come sometimes with interesting cases. I remember once bringing one case that turned out to be a new infectious agent, and it has the name of one of our staff members in the Department of Infectious Diseases at the AFIP. I was very involved with the AFIP. I've always been very active in presenting and getting around.

I once presented a case at the Washington Society of Pathology. I met a Dr. Robert N. Drake. At that time, I think he was called the scientific director at the AFIP, or the director of research. He was a Navy captain at that time. He heard the case that I presented, and we met and we started to talk and discuss the case. He said that he would look forward for me to be involved more with the AFIP, because he was very interested in pediatric pathology. And that person turned out to be the person that called me, offering me a position at the AFIP, when an opportunity came up at the AFIP in 1970.

*Q: Well, back to keeping this chronological, you moved from the Children's Hospital to Georgetown. What were you doing at Georgetown?*

**DR. MULLICK:** I did my senior year at Georgetown. And I was chief resident for a while. ... and I was one of them. I finished my residency at Georgetown.

*Q: Still in pathology, I assume.*

**DR. MULLICK:** Oh, yes, still in pathology.

*Q: At Georgetown, which is a more multi-purpose hospital, as opposed to the Children's Hospital, were you seeing a different type of case?*

**DR. MULLICK:** Well, yes, we saw everything. We saw tumors, infectious diseases. That was excellent for me that they had quite a number of interesting cases in infectious diseases, because, with my strong background knowing infectious diseases, I was able to



sometimes come up with things like, "I think this is leprosy."

And everybody would say, "How come? Why?"

I'd say, "Well, I think it's leprosy, because..." this and that, "and because I've seen it before."

And it turned out to be leprosy, in one instance. So that was for me very good. It gave me a step ahead, sometimes.

But there were the old-fashioned things... a large number of tumor cases, very interesting tumors. That was a very good experience. Georgetown sees a wide variety of very good cases.

*Q: Why would Georgetown? Is it because it's the nation's capital, people have settled there from all over?*

**DR. MULLICK:** It's a big-city medical school. It is a very good medical school. It always was. They have a large number of cases that come, many times for... difficult cases. But I think, by and large, it's because it's a large city, renowned, a good, excellent medical school.

*Q: We're talking about the late 60s. There were two movements, of course, which may have impact. One, of course, was the Vietnam War, which meant that people were involved in a tropical area, and the results of that. The other was the growth of people using narcotics. Did those impact on you at all?*

**DR. MULLICK:** I saw some, but at that time, there was not much of that. It was '69. Not much of that. But, yes, I did see many cases. One activity that I did at Georgetown was that, because of my training at Children's, I was almost given the pediatric cases all the time. I would do the congenital hearts most of the time, because I had had a lot of... at Children's. I forgot to mention that that was a large part of the program at Children's Hospital. The Cardiovascular Department at Children's is very active, and they did a lot of cardiovascular surgery. So we had a lot of cases of congenital anomalies in the heart. And that gave me a tremendous opportunity to do that. I used to like to dissect those hearts, so I made it like my subspecialty.

*Q: Heart surgery has been in very much a state of development, starting from about the 50s. What was the status of heart surgery, particularly with children, in the late 60s?*

**DR. MULLICK:** It was on its way to becoming something very new. At Children's, there were excellent cardiologists and surgeons, very active in doing surgery in little children. Quite a few times, they were very successful, with very little experience with congenital hearts. And, of course, today they are at the top. But it all started, like you said, in the late 50s and the 60s, when I was there.

*Q: At Georgetown, did you still have your connection with the AFIP?*

**DR. MULLICK:** At Georgetown, it was not that much. But I still kept up with what was going on at the AFIP. And then, when I finished at Georgetown, I was offered a position at Children's Hospital. So I went back to Children's as a staff pathologist. And, of course, I continued my involvement with the AFIP. It was more so from Children's. ... was more active with Children's than when I was at Georgetown.

*Q: You would think that with AFIP, a military organization, and although they have dependent children, you would think that the specialties at AFIP would not be in the children's area.*

**DR. MULLICK:** Well, but, you see, diseases are diseases. Even though in pediatric pathology, pediatric tumors have their own special personality, many times, a large number of the other tumors are just like tumors you see in the adults. And, of course, the experts were at the AFIP, for renal diseases as well, for cardiovascular diseases. So almost anything that you can think of, and especially in infectious diseases, we used to look up to the AFIP for an opinion.

*Q: Were there any particular people at the AFIP that you particularly think about in your specialty?*

**DR. MULLICK:** Oh, yes. I used to look forward to come and show cases to Dr. Kamal Ishak, because since that time, he has kind of been a person that I always looked up to as one of the two experts in the field. I had read a lot of his cases. Whenever we had a liver case... We used to get quite a bit of cases with renal-occlusive disease in children, and I used to bring them here and look for Dr. Ishak, for his expert opinion.

I remember, of course, Dr. Enzinger, another of the pillars in pathology. Dr. Lorenz Zimmerman was here as well, for eyes. At that time, there was no one else, and even now, there is no person in eye pathology. So there were people that had an effect on me and that...

*Q: You were at the Children's Hospital from '69-70ish, and then where did you go?*

**DR. MULLICK:** I was at Children's for about eight months, when, like I mentioned earlier, I received this phone call from Dr. Drake (Captain Drake), and he said, "Florabel, do you remember me?"

And I said, "Yes, I do."

"How would you like a job at the AFIP?"

I said, "Well, I think I would consider it. And I think I would love it. But, of course, I have to see what it is, where, and how much."

And we talked. We had a meeting; I came to talk to him. It was an opportunity to develop pediatric pathology at the AFIP, but the main job was in the... reactions to drug... And, of course, I said, "... reactions to drugs what?" Because at that time, the study of

adverse drug reactions was unheard of. A little bit was starting here and there. Of course, the Food and Drug Administration was there. But among professionals, that is not something...

*Q: To put it in context, when you say drugs, you're really talking about...*

**DR. MULLICK:** Therapeutic drugs.

*Q: Regular medicines that people take.*

**DR. MULLICK:** Right. Yes, regular medicine.

*Q: At that time, they weren't really looking at the side effects.*

**DR. MULLICK:** Yes, they were looking at them, looking at side effects, concentrating on pathology, and focusing on pathology. The side effects of drugs have always been there. You know, you get a rash, or you get some kind of shortness of breath, or an anaphylactic reaction. But the study of pathology, the characterization of lesions, looking for an etiological... was going to be a therapeutic drug, that was something that was very new. Not too many people were interested, and not too many people thought that it could lead you anywhere.

So I came, and I met Dr. Nelson Irey, who is now the chairman of what has become the Department of Environmental and Toxicologic Pathology. It started at that time as a small branch, and in all these years, of course, it has evolved. And right now, it's one of the most important etiologies for disease, to look for either an environmental agent, that is, a chemical or a therapeutic drug or any other type of agent.

*Q: What was the impetus? We're talking about, what, 1969?*

**DR. MULLICK:** Seventy.

*Q: What was the impetus for all of a sudden starting this?*

**DR. MULLICK:** It all started in 1965. And it was driven by Dr. Irey, who has always been a man of tremendous vision. He can look ahead and see things that nobody else around him sees. And at that time, he saw... adverse drug reactions. The Institute became very interested in the research and committed themselves to start a branch. It started without funding from the AFIP main funding. It started with grants from the Food and Drug Administration, from the American Medical Association, and from the Pharmaceutical Association. Dr. Irey was given that opportunity, and he developed from scratch that branch, and that has grown to be one of the major departments at the AFIP. He designed a methodology on how to study a case in which a drug was the alleged etiologic agent. He was doing that for five years when I came to... When I came, he

already had his methodology, and he had several hundred cases. Today, we have almost... cases.

*Q: You'd looked from the outside, obviously, with an admiring eye at these towering figures here at the AFIP. But when you arrived, how did you find the organization?*

**DR. MULLICK:** First of all, when I came here to the AFIP, there were only two other women on the staff. So when I came, it was kind of: "Another woman!" Surprise, you know. Something new, different. And, of course, I was also a little different.

*Q: From your Spanish background?*

**DR. MULLICK:** Right, I was a Spaniard, and I had my bright dresses and my long red fingernails and my big hairdo. So I was a little bit different from what at that time, and still even now, is seen as a professional female doctor.

*Q: Horn-rimmed glasses, hair pulled back.*

**DR. MULLICK:** I think, in this society, but not in the society that I come from. In the society that I come from, women are women, and they are supposed to be feminine, and they are supposed to be dressed up, and they are supposed to be fashionable. And that does take anything away from you as a professional and as a knowledgeable individual. But I think, without any applications or anything, just being even nice about it, the image of the professional woman was not what I think I looked like. So I was kind of looked at twice when I passed by in the hall, and I was different.

However, I have to say that I was welcomed with open arms. Everyone was very nice. And I can remember again super nice people, super nice gentlemen in the Environment. Dr. Enzinger really stands out. He was very polite and always made me feel that I was very much welcome. Dr. Hyams, I remember. Dr. Ishak. Of course, Dr. Irey was a super person always, and has always been. So I felt very much welcomed, but I knew that I was a little different.

Then to do something that was also different in the sense that the operation of the Institute was not like it is today. Today, the departments have their own budgets that they manage. At that time, the budget was central, and things were assigned to people. You only had to ask for something and you got it. It was not like it is today. Today, it's very competitive. The departments have to really compete for funds. They have to get outside funds, and everyone is very motivated to do that. But it was different at that time. Also, the laboratories were not centralized. So every department had its own EM (electron-microscopy) laboratory. It had its own histology laboratory. So the way people worked was different. People worked like in areas, because they were almost self-sufficient. They had their own labs; they had their own secretaries; they had a budget that they didn't have to worry about.

But that also had a negative aspect in that people were isolated. So you had the

Department of..., and it was that. And you had the Department of..., and it was that. Of course, the internal consulting has always taken place here. But there was not too much, if at all, collaborative work. Today, it's completely different. People from many departments work in what we call working groups or collaborative groups. They write a research proposal together, their funds, their equipment. It is a different approach to working together.

*Q: I know, as I've been doing this oral history, one of the figures who was only here for a short time was Col. Morrissey, of the Air Force. He left early and sort of left a memorandum in which one of his complaints was this was a bunch of small little dukedoms, for which each one was too individual and they were really both wasting effort and wasting money.*

**DR. MULLICK:** Well, he's right. It had its negative side, in that they were sort of isolated.

In everything, I try to look at the positive side. Well, the positive side of doing like that is that you are identified as a unit that is sub-specialized, you have a tremendous identity outside as that unit alone, and you can stand out.

However, maybe at that time it was not thought of that you can still keep that good identity, you can still be a strong unit, and at the same time you can open up, not just to the AFIP departments (you have... ) you can open up to the whole world. And we have. We have opened up to academic institutions. We have collaborative work, research grants with universities. We have opened up to other government agencies, and we share funding, we receive funding. We have a research proposal to..., for example, with the DEA.

So, sometimes people lose the protection of..., and they think that, well, I'm alone, I'm very strong, I'm self-sufficient and I don't need anyone, or I might lose something if I opened up to somebody.

It does not have to be. You can be a unit, you can have your identity, you can be strong, you can do whatever you want to, but at the same time, you can open up to the whole world, nationally and internationally.

That's another new thing at the AFIP. In the last seven or eight years, we have opened our arms to the international world more so than we used to do before by sending our fascicles. Now, we have collaborative efforts with other countries. We have a collaborative effort with Germany, with Japan, with many countries. And that makes us stronger. And that teaches us a lot, because there's no way we can know everything and we can do everything. I think that, in other words, is what has allowed the AFIP to be at the top and stay at the top.

*Q: When you started in 1970, you were working on basically (I'm putting it into layman's terms) adverse reactions to drugs.*

**DR. MULLICK:** Right, and concentrating on the pediatric group.

*Q: What was your initial concentration? Were there any problem drugs?*

**DR. MULLICK:** The first thing I wanted to do was, and that was also requested that I do it, that I look at the pediatric of relations in that group of patients in the branch, the pediatric drug branch. So I remember that even the first few months that I was here, I put together two hundred cases of pediatric adverse drug reactions. At the first international meeting of the International Academy of Pathology, I presented that. So, very quickly, I got to work, and I paid a lot of attention to that particular group of cases. And I realized that, contrary to what other people used to say and..., pediatric adverse drug reactions occur, and they can be as lethal and as... as in the adults. And that has been one main interest of mine since then.

*Q: Any particular drugs that you were looking at, at that time, that when you would treat a certain problem, it turned out they'd have even greater side effects?*

**DR. MULLICK:** Yes, at that time, I don't know if it was... or that I looked for it or what, but calyculate was something that immediately caught my eye. I saw all these cases of calyculate toxicity. Some of them didn't have lethal levels at the numbers that we know about. And we know that a certain number is lethal. These babies had less than that amount; however, they had died of what looked clinically like calyculate toxicity. So I started to look at the organs, and I noticed that there was some peculiar micro... in the liver. And I put case number one on my desk, and I said put case number two, and I, through the years, collected thirteen cases. And those cases eventually became very important in the issue of what is the cause of Reye's Syndrome. Reye's Syndrome was a disease that killed almost every baby that it affected. All the organ systems got filled with..., and it was quite lethal, including parts of the brain.

So it so happened that I became lucky. One researcher from the CDC (Centers for Disease Control), and two other researchers, one in Michigan and one in Ohio, published three epidemiologic studies, and they said, "Children that consumed calyculate had a higher incidence of Reye's Syndrome than children that didn't." One of those researchers said, nationwide, who had autopsies with.... pathologists..., along those lines. And when he called here, of course, I said I have them. So he came over, and we worked together, and we published a paper that became very important in that issue. And that led to other papers. And eventually it won and is included in the package insert of calyculate. You must have heard, because it was in all the newspapers, that you are not supposed to use calyculate in children with inoperative... infections that you suspect is a virus, and definitely should not be given to children with chicken pox. So that became a very...

*Q: What was calyculate used for?*

**DR. MULLICK:** Calyculate aspirin is used for...

*Q: It's just an aspirin.*

**DR. MULLICK:** It's aspirin, regular aspirin. It was given to children for fever. Sometimes what happened in some cases was that the child was being given the prescribed dose of aspirin for the fever. But then the child maybe developed a cough, so the mother would give some cough medicine from over the counter that maybe had a little bit of aspirin in it. And, without wanting to, she was giving a little bit more dosage; not being in the lethal range, but it definitely became a toxic dose.

*Q: At the time we're talking about, the early 70s, how was the referral system from outside working for your particular branch?*

**DR. MULLICK:** Numbers of cases have never been very large. But we had a consistent, regular flow of accessions, on a subject that was not very popular. And I recall very vividly that when I came to this Institute, someone on the staff said, "Are you sure you want to stay in that section, doing this kind of business? That will really lead you nowhere." I will never forget his words, because it hasn't been that way. So it was not a popular subject, and many times I felt like a priest in the jungle, getting nowhere. But the flow of cases kept on coming.

*Q: Did you find that in your work you had to go out and encourage people in other parts of the country, or from the military, to send cases to you? Was this sort of your lifeblood that you needed? Or could you work from what you had developed here?*

**DR. MULLICK:** No, I didn't need to go out and kind of hopefully request cases. I noticed that after I presented the first paper at the international meeting, cases started to come in. And many of them came with my name specifically. So I said ah hah, this is the way of getting cases. If you get out, you present your data, you write a paper, people get to know you, and then they send you those cases. And that's proven to be true. I used to notice that after going to a meeting and presenting something, or going to a local conference or something, I would notice new cases coming in. So that was how.

*Q: Were there any universities or teaching hospitals working on your general area? Or was the AFIP really the...*

**DR. MULLICK:** I think the AFIP has been the pioneer along those lines. Of course, there have always been professional scientists that have paid a lot of attention to the subject. Very few doctors around the country... pathology and adverse drug reactions. The AFIP, Dr. Irey, and then I came onboard and I helped Dr. Irey. Dr. Irey has really been the pioneer in the subject, and the AFIP, of course. And through the years, Dr. Irey, as I said, has had the vision. After we had a lot of cases on these therapeutic arenas, therapeutic drugs, then Dr. Irey thought, well, ... in the environment need attention. So we expanded into that. We changed the name of the branch, we became a division, and

we added the environmental name. And then we proceeded along those lines, mostly with Dr. Irey's side. And now it's quite a large department. We used to be only him and myself and one secretary, and now there are four pathologists, including myself. I still work in the department as a staff person. There are two Ph.D. chemists, three technicians, one MD Ph.D. clinician, a biochemist, an MD, two biochemists... It's quite a large department, with several divisions, and very active.

*Q: As you were working in this specialty (after all, this is the Armed Forces Institute of Pathology), did you find an armed forces area? They live in their own environment, you know, inside tanks, inside planes, ships and that sort of thing. Were you looking at things of this nature?*

**DR. MULLICK:** Well, yes. We always, at the AFIP, think about military relevance, because we know what we are, and we know who is our... the Army. We know who funds this Institute, and we are very much aware about the name: Armed Forces. So we always try to find, and we always look for a military relevance.

We were very pro-active and worked very actively with the Agent Orange. We have, at the moment, almost six thousand cases. When we saw the problem brewing, Dr. Irey wrote letters to the VA, requesting that all cases that had biopsy or autopsy come here. And we had a very good response. We wrote a paper on the agent, and we are in the process of writing another one, with the rest of the cases. So we were very much involved with the Agent Orange project. In the last few years, when the Gulf War happened.

*Q: This was the war between the United States and its allies against Iraq after it invaded Kuwait in 1991.*

**DR. MULLICK:** In 1991. And I do remember when the Iraqis were leaving the war theater, they set fire to the oil wells. And that's the situation that is called Gulf War Agent Smoke... And, again, Dr. Irey, very visionary, started to request that the powers that be approve for us to have a registry. And we have a very active registry, with these cases. And the data in that registry is being... by all the... agencies that are involved with the problem. So we are very active in that area. We have over a hundred autopsies studied. There are over three hundred that have to be studied. And we have about a hundred cases documented from the VA from their program. We are part of a... study. We have also studied animals that were at the area. And we have... nationals with the problems related to the smoke. So we are very active and continue to be very involved.

*Q: Are you finding anything?*

**DR. MULLICK:** No, we have no positive findings. We have done metal analysis, and no positive levels either. Our findings are completely negative. We have a negative study.



*Q: We're talking about two things. We're doing this as a historian, and sometimes it's hard to recreate the situation, but both in Agent Orange and in this one, there are media accounts, there are people who have other agendas, and just plain concerned people. But these are extremely political, and often the politics are not medical, but using the medical in order to push a particular agenda--against war, against Vietnam, against what we were doing in Iraq. They've got very vocal proponents of: There is something out there, and the government is trying to cover up. You're on the spot, you're the disinterested scientist, you're paid by the government, and you're paid, even worse, by the armed forces, in the eyes of somebody who feels there's something out there. How do you deal with this?*

**DR. MULLICK:** Well, first of all, I would like to say that you just said something that I don't agree with. You said the government is trying to cover up. Definitely, what you meant is that there is a perception that the government is trying to cover up. I know you don't feel that way, I'm sure. That is why it's so important to study diseases, because there is that perception, maybe because they don't want to pay benefits or whatever.

However, on the other side of the coin, we have people with real problems. And for them, scientifically... real or not, it's a real, true problem. So we have constituents, who are the veterans, the soldiers, they have a problem. We have a tremendous obligation to listen to them and to do something about it. And that is why I see that as a tremendous responsibility that I personally have, that our Institute has, in being involved in those issues.

And even if it's a negative study, it's important. If it's a positive study, we will say so. We have positive findings in our studies, such as cirrhosis in some of the livers that we have seen. However, when we look into the history, we see that that happened to an alcoholic veteran. So you have an etiologic case in there. But if I didn't find that, then I feel very responsible that I need to say, "So many veterans, or one veteran, has cirrhosis of the liver. Why? Let's look for that." See?

So I think that we have a tremendous obligation, because the veterans have a problem, and they complain about it, and they are feeling miserable.

Second, because there are activists out there saying that, yes, the government is not telling us the real problem, because they are trying to cover up, they don't want to pay, they don't want to be accountable.

Third, because there are congressmen that feel, again, very... [end side A]

Well, at the moment, there are several other issues that the military is studying, not because it's related to what they do. But they are studying the lead levels in the members of their troops. They are, of course, studying infectious diseases. They are studying HIV. And they are studying wellness. They want their troops to reduce smoking and alcoholic..., and to do more exercise and improve their diet. So those are all things that we are also looking at. We are concerned about sudden death due to an exercise. And we have the Department of Cardiovascular Pathology studying that. That is very military relevant. We are studying women's health issues in the military. So we

are always studying military-relevant diseases.

But at the moment, I think what really consumes us, and what is the real big problem for the military, is the Gulf War illness. And still we can see some from the Agent Orange.

Of course, there are other situations in the military. For example, there are test sites for weapons, like there are areas in Arizona, for example. There is a big concern what happens to the tortoises in that area. Some tortoises became ill. The tissue came here. We helped study it. The Department of Veterinary Pathology is very, very much involved in environmental disasters. They studied the animals, and we found out that it's an infectious agent that is affecting the tortoises and killing them, not the military activities.

*Q: When we say military activities, you're...*

**DR. MULLICK:** Testing weapons.

*Q: We're talking about testing particularly bacteriological warfare and chemical.*

**DR. MULLICK:** No, I'm not talking about that. No, I'm not talking about that. No, I'm not addressing that. That is the tradition that even though I am involved with it, that cannot be measured. But there are open testing areas, in Arizona, for example. And they think that because of the noise or the disturbance of the environment, the tortoises are being affected. And we found that it's due to an illness that is endemic among tortoises. It's not being brought on by anyone into that environment. It's part of them. Just like we all have *E. coli* in our GI tract. That's...

*Q: I was wondering, we get into these things such as the Gulf War, but there were a lot of other armies involved, including Iraqis, British, French and all that. Are these same manifestations appearing there? Are you able to tap into foreign nationals who were...*

**DR. MULLICK:** Yes, the word is that the Gulf War illness has been called an American illness. However, I just listened to a briefing by the military attaché from the British Embassy, and he described that they had, I think, a total of twenty cases. In twelve of them, they found some etiologic agents. Eleven of them are still unknown. And they have a few that are undecided. So the British also have something that is unexplained among the troops that went to this war.

*Q: What seem to be the problems that are coming? For historical reasons, what are they?*

**DR. MULLICK:** Well, you mean the complaints of the soldiers?

*Q: The complaints, yes.*

**DR. MULLICK:** Yes, well, they have complaints such as tiredness, loss of hair, loss of weight, fever, tremendous weakness, almost to the point of feeling that their muscle is wasting. It is a large number of nonspecific signs and symptoms, but when you put it all together in one particular individual, it is a very, almost crippling illness for some of them. And it's a real, real illness. It has been studied in depth, and so far we have no true cause for that. But studies continue.

*Q: Here at the Institute, have you been involved in training people coming in?*

**DR. MULLICK:** Oh, yes, we are very active in training, at all levels. I personally have been very interested in training and in exposing high school students to science and pathology. And even before I was director of the Center for Advanced Pathology, when I was a staff member of the Environmental Department, I was always very involved in bringing students. We have a very active program for high school students. We accept fifteen students in the summer, and they're exposed to different departments. We follow them up, and many of them become doctors.

*Q: How do you recruit them and where do they come from?*

**DR. MULLICK:** Oh, they apply from all high schools. They know about this program. We are part of this Defense program for engineering and science that is coordinated and administered by the George Washington University. And these are Department of Defense funds. Many agencies are involved--NASA and other agencies. We are one of them. And we are very successful. We receive a lot of applications. And these are all outstanding students, A students, that want to pursue a career in math and science. So we are very interested in that program. We hope for next year to expand it into also a college program. So some of the students that come from high schools, they want to come back as college students, and then they want to come back when they are medical students or Ph.D. candidates. That is a program that is a joy, to see all these wonderful-looking, smart kids that have a future, actually.

*Q: How do you use a bright, young high school student here during the summer?*

**DR. MULLICK:** Oh, they know, and we tell them, that that is a real job. They are not here to file papers or to pace the halls or to just talk to people. They come here to work. Some of them have an idea of what they want to do. They are interested in pediatrics, or they're interested in computers. So we first tap them and ask them, "What is your interest?" Then we tell them, "Do you have an idea about a project?" Some of them do, some of them don't. Then the mentors, who are members of the staff in the individual departments, design the projects.

Some of them, believe it or not, have had review cases, pulled data together from the clinical charts, records, and then they have proceeded to look at the slides with the

mentor, they have taken pictures, they have prepared the data and organized it in a manner that they can present it. And they have presented it, almost like a real pathologist. And some of them are co-authors in scientific publications that are peer-reviewed by prominent journals. That is one example.

Others participate in handling equipment. So they learn one piece of equipment, and they are helpful in, for example, processing samples through the spectrophotometer. And then, with the results that they obtain, they work with their mentors and they prepare a presentation describing the methods and describing the results.

They have two opportunities to present the material. At the AFIP, we have a day of presentations, and they present in the auditorium, in front of the staff. And then they also have to present at the end of the program, at the George Washington University. So it's very formal.

*Q: It sounds like an excellent program. What about training internationally?*

**DR. MULLICK:** Yes, we have a program that makes it possible for international students to come, at all levels. And they come for periods of time to the different departments. They apply to the department that they want to come to. And because they are foreign nationals, they have to be cleared through a... process. And they have a fee to pay for their training. That also is also is very successful. Every year, the program increases by leaps and bounds. At any given time, we have many of those in different departments.

*Q: Are you seeing a change now that the Cold War is over?*

**DR. MULLICK:** Yes, yes, we have requests from all over the world. One area that is really increasing is South America, for some reason. It might be because we are having certain activities focused on the Spanish-speaking population. We are going to start the first pathology course all in Spanish, using our Spanish-speaking staff. We are translating our histology manual into Spanish. That's a first. And we will continue with the advanced manuals. We are having several courses in Latin America. We have an activity with Brazil. So that is expanding. We have courses almost in two-thirds of the world. I could think of Japan, Austria, Germany, Spain, China. So many of them are international efforts.

*Q: When you say you have courses, what do you mean?*

**DR. MULLICK:** The AFIP staff travels to the site and presents the international courses. To be very specific, there is a radiology course that takes place in Japan, in Spain, in Mexico, recently in Austria. That course is fully funded by the host country. Our staff travels and presents a lecture. We are the faculty, and they do the administrative side. Extremely successful courses. And we get more requests like that very frequently.

*Q: Do you find the fact that you're coming from the Armed Forces Institute causes problems in some countries, because they think that, well, this is a military organization?*

**DR. MULLICK:** No, we don't, because I think we enjoy a name. Especially a lot in this country. Nationally, there is a tremendous positive feeling for the AFIP, but very specially in the foreign countries. I know, because I travel quite a bit. I travel all over the world. I have been all the way to Africa. When I'm introduced and I say I am from the AFIP, "Oh, the AFIP, that's where you people know everything." I hear that. So our name carries a big clout, and it adds to the charisma of whoever is at the place at that time.

*Q: In your present work, are you finding there are any particular areas in the environmental, other than the Gulf War situation, that are causing problems? Are there certain medicines or procedures?*

**DR. MULLICK:** There are groups of medicines, not to say that they are causing major problems, but they do cause problems, and we are focusing on that. We have created panels of experts from all over the country. We have put together veterinarian and human pathologists in groups. And we decide what types of drugs we are going to study, because of different things, either they cause an entity that we are interested in, or it affects an organ that we like to study. So, for different reasons. We have, for example, now focused on nonsteroidal anti-inflammatory drugs and their effects in the kidneys. So we have a very active panel studying that. And we are collecting cases. And we hope to establish a successful registry along those lines. We have the cooperation of the Renal Network. That is one example we are focusing on.

*Q: I can see that in a way it's a sort of dual situation with the drug companies. One, they obviously want to find out what drugs are working, and if there are side effects, to get it out. This is their business. But at the same time, there is the legal aspect. If you delve too far, then there can be all sorts of suits. How do you find working with new drugs, because of this conflict between trying both to help the situation, but also the legal aspects?*

**DR. MULLICK:** Yes, yes, yes, what you say is very true. It is an excellent observation that is a fact. The pharmaceutical companies are very interested in knowing adverse drug reactions, very interested. In all my dealings with pharmaceutical companies, I can say that they are very honest about it. They are open about it, with limits. And they are very cooperative. Especially in our panels, we have several members from pharmaceutical companies. And many of them are some of the most active members of the panel. They are willing to share their data with us, with limits, of course. They will not donate or make accessible their experimental-animal studies. So there is a limit to that. However, they are very interested in studying the problem. I find it quite gratifying to see that they are true scientists and that they do want to know the truth, regardless of whatever it's

going to cost, even if it's going to get the stockbrokers panicky in New York on Wall Street. But they are honest people. They do want to know the truth.

*Q: Can you be called upon to testify in legal cases, suits and things like that?*

**DR. MULLICK:** I try to stay out of it. I have been called as an expert witness. Unless it's an official case of the Institute, we try to shy away from that. Otherwise, especially in my field, I could be sitting in a courtroom forever and ever, and never have a break. So we have a limit to that. I have made myself available for depositions. And I coordinate that with our legal counsel. So when there is a case and some group of lawyers have questions and they want to get my opinion, I am available. I have been available, of course also with limits, because otherwise, again, I could be sitting in a room forever. But we do testify and we are available. We do not charge for that, obviously, because of the conflict. But I have done it many times.

*Q: I'm jumping around a bit, but you've mentioned before how the AFIP, since you came in, has become much more cooperative, and that you no longer have these little independent states. Have you noticed any change in the personnel that are coming in? Because at one time, the AFIP was the dominant force; there was no one else doing almost anything that it was doing. And now I understand, as time has gone on, universities have begun to have their own centers of particular things. Have you noticed a change there?*

**DR. MULLICK:** Yes, well, yes, it's true what you said. We mostly almost had a monopoly on the experts, because they sort of grew up here, and they stayed here. Now, like you said, many universities have become very prominent in certain areas, on tumors, on kidneys. But we do still keep many of those experts. And we nurture younger people to become expert. We breed them, and we try to keep them. That's one aspect.

We also attract different levels of scientist. We attract young scientists that are very interested in this type of environment, in subspecializing in one area and becoming very good in one area. And I am very thrilled to say, we are also able to recruit top experts. We have several recruitment actions ongoing at the moment. And I can really tell you that we have been able to actually get proposals and requests for jobs from top, top people in the country. We have a limiting factor in that we do not pay as much as they would get in the private sector.

*Q: And Washington is an expensive area.*

**DR. MULLICK:** Right. That limits us in, by and large, not always, attracting big experts. But at the moment, we have two very prominent pathologists in this country interested in two of our... And in one of them I am almost sure we are going to be able to attract the individual. So there is a gamut of different types of people that we attract. And it happens at all levels.

But we have noticed, in the last three years, that we are again being able to attract very excellent people, at junior levels, mid-levels, and also at the top levels.

*Q: I'm always interested in the how-to. You want to recruit some people. What do you do? Let's say where do the orders come, and let's say you're looking towards the future. Do you keep sort of a wish list? How do you go about recruiting?*

**DR. MULLICK:** First of all, we try to do all this fairly and openly. So we set up a search committee. I think maybe in the good old days, I'm not too sure, but just like the way I was hired.

*Q: I was going to say...*

**DR. MULLICK:** Somebody knew me, somebody kind of thought I could do the job, and somebody called me, and I came here, and here I am, sitting at my desk. These days, it's not like that. Even though I was privileged and I enjoyed the other system, these days, it doesn't work that way.

The first thing that I do (because I happen to be in charge of recruiting for the Center for Advanced Pathology, I'm talking about that) is we set up a search committee. And we try to be as inclusive as possible. And by that I mean that if I am recruiting a radiologist, for example, I try to see which are the departments that are mostly involved with radiology. So we select seven, eight, nine, ten people, and that constitutes our search committee. From now on, in addition to that search committee, we have what I have called the advisory council for the Center for Advanced Pathology. We have six senior members of the staff, all chairs, that advise me on issues such as recruiting. So they take part in it, plus the search committee takes part in that. And, of course, each member of the team knows somebody. It sort of starts that way, you know: Who knows who that might be interested? And we put out our people, seeking candidates. We also advertise. And we tell the scientific advisory board, we tell some of the members of the board of governors. So we spread the word. And we have been successful in recruiting, quite successful in the last seven, eight years.

*Q: Are you involved in publishing reports or study guides, or this type of thing?*

**DR. MULLICK:** Well, the Institute has the annual report, which consists mostly of the Center for Advanced Pathology. We are the largest unit in the building. There is also the research report.

I am in the process of designing a brochure that will list all the educational opportunities at the Center for Advanced Pathology, so that we can send it out. For example, I just received a letter from someone who wants to know what are the opportunities for study at the Center. And this is a resident. So we are very interested in giving them our best, because we want to recruit good people. That's where we start, by informing residents in pathology what we do and what we can do best. We are approved

for the fifth year of the training of the pathologists, so we want to attract those people as well. So I would really like to see an excellent brochure, describing everything we do and all the opportunities that we have for study.

*Q: Do you find yourself in any competition with the National Institutes of Health (NIH) in Bethesda?*

**DR. MULLICK:** Well, not real competition. Of course, we compete for things. Like they compete for grant money, we apply for the intramural funding. But we mostly collaborate with the National Institutes of Health. We have common projects. For example, we have a fellowship program in pulmonary pathology. This is the first and one and only pulmonary fellowship. And it is done with NIH. NIH pays half of that person, and we pay half of that person. So, six months, the individual is here doing clinical pathologic studies, and the other six months, the individual is at NIH doing molecular biology. So we mostly collaborate with NIH. Sometimes we get recruits from NIH. In that sense, I guess we compete with each other. But it's all done in the best of spirits, and we have tremendous collaboration with NIH. Several members of our staff are consultants at NIH, and they actively participate in activities at NIH. And I personally get involved in briefing NIH division chiefs and collaborating in any manner that I can with them.

*Q: The Center for Advanced Pathology is a fairly new creation, isn't it?*

**DR. MULLICK:** It has existed for many years. My position, for example, is new. The way we work is new. Basically, the infrastructure of the Center is the twenty-two pathology departments, and those departments are mostly organ oriented. But we have departments that cut across every specialty. For example, the Environmental Pathology Department, Infectious Diseases, the Dental and Oral Department, Legal Medicine, Veterinary Pathology. Those cut across everybody's entity. So that is our infrastructure. And that has been there for a limited number of years. The Center was established many, many years ago, before I came into the picture. I was part of the Center when I was a member of the staff of the Environmental Department.

What is new is the way it's structured, the way it works, and the new things that have come up with my appointment. You see, we started five associates directors, nine years ago, and each one had a group of people. Each one of us was responsible for the administrative work of those departments. For one reason or the other, I'm left alone now, and I'm in charge of the twenty-two departments.

New things at the Center are, for example, what I mentioned earlier about the budget. The budget used to be central, and now it is in my office and in the office of the individual chairs. We decide on the budget; we work with the chairs, and we decide on an amount that is assigned to the department, and they manage it from there. That is a very new, very innovative thing at the AFIP. And that has been in existence for the last several years.



Then we also have a difference in the way we work together. We have organized different groups. For example, the first group that we organized in that fashion was what we call the Joint Committee for AIDS Research and Education (JCARE). The committee is composed of members of any department that is involved in AIDS work. And for the first time, all these people got together. It was created about five years ago. They got together around the table and they discussed their work. Some of them, of course, expressed a frustration in not being able to do X, Y, Z. And to my surprise (I chair the committee), I saw Dr. So and So say, "Oh, you cannot do that because you don't have X? Well, I have some funding that would allow you to buy that, and you can do your work." Hooray, that was a brand new thing here! So they share resources, they share ideas, and they share funding. That was very successful.

So when I became director of the Center (that was this January, 1994), I thought that I would like to see that continue. So we started the molecular biology working group, the imaging working group, the electronmicroscopy working group, the consultation working group. And that is a big effort into automating and making our consultation work be the best, state-of-the art, most timely, most modern. And last but not least, the advisory council, with this group of senior chairs that advise on all matters in the business of the Center. So it is a very opened approach, it's a collaborative approach, it's a very visionary approach. We want to be right there when this new health care system starts. We want to also be very much oriented towards tri-care. And so far, I see that the attitudes are excellent, the morale is good, and they are very interested in working together and being with it (you know, these modern words).

*Q: I've been keeping you talking here for almost two hours now.*

**DR. MULLICK:** I like it, though. I'm new for that.

*Q: Just sort of to finish off. Where would you like to see the AFIP be by the year 2000?*

**DR. MULLICK:** Well, all these things I have in my head are very new things that are happening, and they are tied to the new health care system. They are tied to the reorganization of the military. You know, there are a lot of cuts and military medicine is being completely reorganized. So I want to be there when military medicine is different. And when military medicine completely changes, I want the AFIP to be there. Already we are thinking about how we are going to fit into the new tri-care system--all these regions that are being created, the new way of doing medicine. I would like the AFIP to be right in the thick of it, to be *the* foremost second-opinion place in the world, and to be extremely useful to the military. All the second-opinion work that would be done in military hospitals or by contracts outside, whatever it is, I would like to see all that come together into the AFIP, and for us to be the number-one player in the new military medicine.

*Q: Again, I like to put these into context. You keep talking about the new medicine in*

*the United States. What are you talking about?*

**DR. MULLICK:** It is the concept of tri-care. Military hospitals, the main centers are being reorganized, and you will have lead agents, and that lead agent will take care of tri-care. I mean, in the Air Force medicine, they are going to be given the budget, and they are the ones that are going to coordinate all the resources and all the medicine that will be done by the military. That is the new way of doing medicine.

*Q: Rather than an Army hospital, a Navy hospital...*

**DR. MULLICK:** That's right, yes. Tri-care is... As you know, the office of the surgeon general for the Army has been reorganized. Different divisions and areas are being incorporated into all the offices of the surgeons general of the Army and the Navy and the Air Force. And in all these new things that are happening, I see the AFIP having a very prominent place and playing a very important role and being, most of all, of use and of value to the military and to military medicine.

*Q: Well, doctor, I want to thank you very much for that. I really appreciate it.*

**DR. MULLICK:** Thank you for the opportunity. It was a pleasure.